

FED. SUP CLASS  
2620

THE TIRE OR CASING SHALL BE IN ACCORDANCE WITH THE APPLICABLE  
REQUIREMENTS OF SPECIFICATION MIL-C-5041 EXCEPT AS SPECIFIED HEREIN

MS PART NO.	SIZE	TYPE	PLY RATING	VERT. LOAD LBS.	STATIC LOAD RATING LBS.	INFL. PRESS. PSI RATED	BURST PRESS. PSI MIN.	BEAD WIDTH IN. MAX.	WEIGHT POUNDS MAX.	STATIC UNBAL. oz.-in. MAX.	TREAD	MOLD SKID DEPTH MIN.	DEFLEC. 1/2" 1/2"
MS26536-2	30x7.7	TT	18	64,500	16,500	270	1/1200	2.00	51.0	19	2/Rib	0.23	32.0%
MS26536-2	30x7.7	TL	18	64,500	16,500	270	1/1200	2.15	53.0	19	2/Rib	0.23	32.0%
MS26536-3	30x7.7	TL	22	100,000	21,300	360	1/1260	2.25	60.0	19	2/Rib	0.23	32.0%

1/ New tire or casing  
2/ At least three, but not more than seven continuous circumferential ribs  
TT- Tubetype Tire  
TL- Tubeless Tire

THE TIRE OR CASING COVERED BY THIS DRAWING SHALL BE SUITABLE FOR USE AND PROVIDE REASONABLE SERVICE LIFE ON NAVY CARRIER TYPE AIRCRAFT DURING ALL NORMAL OPERATIONS AT TAKE-OFF SPEEDS OF NOT MORE THAN 140 KNOTS AND LANDING SPEEDS OF NOT MORE THAN 120 KNOTS ON ALL TYPES OF RUNWAYS AND ON AIRCRAFT CARRIERS.

- THE TIRE OR CASING SHALL WITHSTAND WITHOUT FAILURE THE TESTS SPECIFIED IN PARAGRAPHS (1), (2) AND (4):
- (1) BRUISE TESTS - THE TIRE OR CASING SHALL BE INFLATED WITH AIR TO 300 PSI FOR 18 PR. AND 425 PSI FOR 22 PR. AND LOADED AGAINST A ONE AND THREE EIGHTHS INCH (1-3/8") DIAMETER LENGTH OF PLAIN ROUND BAR STOCK. A VERTICAL LOAD AS SPECIFIED ABOVE SHALL BE APPLIED WITH THE VERTICAL CENTERLINE OF THE MOUNTED TIRE OR CASING MAKING AN ANGLE OF 90 DEGREES WITH THE PLATEN. IMMEDIATELY FOLLOWING THE RELEASE OF THIS LOAD THE TIRE OR CASING SHALL BE SUBJECTED TO THE SAME LOADING CONDITION AT A SPOT 180 DEGREES FROM THE INITIAL POINT OF LOADING.
  - (2) DYNAMIC TEST - FOLLOWING THE ABOVE BRUISE TEST THE SAME TIRE OR CASING SHALL BE SUBJECTED TO 25 DYNAMOMETER LANDINGS AT A SPEED OF 120 MPH WITH AN INLANDING SPEED CALCULATED TO MAKE THE TIRE ABSORB 80% OF THE INITIAL FLY WHEEL ENERGY WHEN COMPUTED IN ACCORDANCE WITH SPECIFICATION MIL-C-5041. THE TIME BETWEEN LANDINGS SHALL BE SUCH THAT THE CONTAINED AIR PEAK TEMPERATURE WILL NOT EXCEED 175°F ± 10°F OR THE CARCASS PEAK TEMPERATURE WILL NOT EXCEED 195°F ± 10°F. THE STATIC LOAD RATING SHALL BE USED AND THE INFLATION PRESSURE VARIED AS NECESSARY TO PRODUCE A STATIC DEFLECTION OF 32% ON THE FLYWHEEL SURFACE.
  - (3) BURST TEST - FOLLOWING THE ABOVE DYNAMIC TEST THE SAME TIRE OR CASING SHALL BE SUBJECTED TO A HYDROSTATIC BURST TEST. THE PRESSURE SHALL BE INCREASED UNTIL THE TIRE OR CASING FAILS AND THE FAILING PRESSURE REPORTED IN THE QUALIFICATION TEST REPORT.
  - (4) DYNAMOMETER TEST - A NEW TIRE OR CASING SHALL BE SUBJECTED TO 50 HIGH SPEED (120-90MPH) AND 50 LOW SPEED (90-0 MPH) LANDINGS AS DESCRIBED IN SPECIFICATION MIL-C-5041.

NOTE - WHEN THE CONSTRUCTION OF THE CONVENTIONAL AND TUBELESS TIRES ARE IDENTICAL, EXCEPT FOR THE TUBELESS TIRE INNER LINER, ONLY THE TUBELESS TIRE NEED BE QUALIFIED IN ACCORDANCE WITH THE REQUIREMENTS OF THIS DRAWING.

MARKING- IN ADDITION TO THE MARKING REQUIRED BY SPECIFICATION MIL-C-5041 MS PART NUMBER SHALL BE ENGRAVED OR EMBOSSED ON ONE SIDEWALL IN THE VICINITY OF THE SIZE AND PLY RATING MARKINGS.

LOAD DEFLECTION CHART - A CHART SHALL BE SUBMITTED SHOWING LOAD - DEFLECTION CURVES FOR INFLATION PRESSURES AT RATED INFLATION AND AT 160 PERCENT OF RATED INFLATION. THE MAXIMUM DEFLECTION SHALL BE INDICATED WHEN THE TIRE IS BOTTOMED WITH THE INITIAL PRESSURE EQUAL TO RATED INFLATION.

PRINTS - PRINTS SHOWING THE ACTUAL SIZE, SHAPE AND TOTAL AREA OF THE FOOTPRINT OF THE TIRE OR CASING AT DEFLECTIONS OF 32% AND "BOTTOMED" SHALL BE SUBMITTED.

SECTION-A REPRESENTATIVE SECTION OF THE QUALIFIED TIRE SHALL BE SUBMITTED.

AIR RETENTION - THE TUBELESS TIRES SHALL BE INFLATED TO A PRESSURE OF 432 PSI FOR 18PR. AND 576 FOR 22 PR AND ALLOWED TO STAND FOR A PERIOD OF 24 HOURS AT WHICH TIME THE PRESSURE DROP DUE TO GROWTH SHALL BE MEASURED. THE TIRE SHALL THEN STAND FOR AN ADDITIONAL 24 HOURS AT WHICH TIME THE PRESSURE SHALL BE MEASURED AND THE TIRE INSPECTED. THE AIR PRESSURE LOSS SHALL NOT EXCEED 5 PERCENT AND THE TIRE SHALL NOT REVEAL ANY APPEARANCE AND PERFORMANCE DEFECTS SUCH AS SIDEWALL BLISTERS, TREAD SEPARATION, ETC.

QUALIFICATION TEST REPORT - THE QUALIFICATION TEST REPORT SHALL LIST THE RESULTS OF ALL QUALIFICATION TESTS AND THE CONSTRUCTION DETAILS OF THE QUALIFICATION TEST SAMPLE IN THE GENERAL FORM SHOWN IN FIGURE 6 OF SPECIFICATION MIL-C-5041 WITH DIMENSIONS LISTED AT RATED INFLATION. IN ADDITION, IT SHALL ALSO LIST THE ACTUAL CASING DIMENSIONS WHEN THE CASING IS INFLATED TO 300 PSI FOR 18PR. AND 425 PSI FOR 22 PR. THE REPORT SHALL INDICATE THE MANUFACTURER'S TEST NUMBER FOLLOWED BY THE LETTERS "WEP". SUBMIT TWO (2) COPIES OF THE QUALIFICATION TEST REPORT, TOGETHER WITH THE DATA AND MATERIAL SPECIFIED ABOVE, TO THE BUREAU OF NAVAL WEAPONS, NAVY DEPARTMENT, WASHINGTON 25, D.C., ATTENTION: RAAC-362.

NOTES - THIS DOCUMENT HAS BEEN PROMULGATED BY THE DEPARTMENT OF DEFENSE AS THE MILITARY STANDARD TO LIMIT THE SELECTION OF THE ITEM, PRODUCT, OR DESIGN COVERED HEREIN IN ENGINEERING, DESIGN AND PROCUREMENT. THIS STANDARD SHALL BECOME EFFECTIVE NOT LATER THAN 90 DAYS AFTER THE LATEST DATE OF APPROVAL SHOWN.

REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

© CANCELED AFTER 8 February 1973 NO SUPERSEDING STANDARD.

P.A. NAVY - BUMPS	TITLE	MILITARY STANDARD
Other Cars	TIRE/CASING - AIRCRAFT, 30 x 7.7 TYPE VII (NAVY)	MS26536 (WEP)
PROCUREMENT SPECIFICATION	SUPERSEDES:	SHEET 1 OF 1
MIL-C-5041		

APPROVED 11/3/56 REVISED 12/1/61 8 Feb 1973

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